

ABSTRACT OF THE DISCLOSURE

A process is provided for manufacturing industrial detergents and industrial detergent components in granular or agglomerate form on a dry basis in an essentially horizontally oriented fluidized bed. The finished detergent granulates or agglomerates are distinguished by a homogenous composition of the individual raw material components, including the binder and the moisture content, have a high resistance to mechanical stress, are readily dispersible in water, and are low in dust or almost dust-free. In the process a binder and/or components in the form of solutions, suspensions, or melts are added to the solid material in the fluidized bed via a spray or injection system. Through the energy introduced via the process air, drying and compacting of the agglomerate / granulate forming in the injection area of the fluidized bed occur. The supply temperature of the process air is in a range of about 20°C up to the decomposition temperature of the individual materials. By adjusting the drying parameters, the product moisture can be varied. The particles entrained by the process air from the fluidized bed are separated from the air in an expansion zone provided with cross-sectional widenings integrated into the fluidized bed apparatus and in a filter system connected to it, and are conveyed back into the fluidized bed and agglomerated there. A low-dust or dust-free product results that having a granularity range of about 0.2 to 2.0 mm.